

Message

From: Manzanilla, Enrique [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0482B3CC383348B887A1800BC40C0A72-EMANZANI]
Sent: 1/5/2017 12:43:45 AM
To: Jordan, Deborah [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=b3dbf2d18ec74d249d23ef5b7791e02b-DJORDAN]; Zito, Kelly [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=77b35bcb5354401dbc1c29cd98fb97fa-KZITO]; Keener, Bill [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=db84cd2497b54cceb83aec253555398e-BKEENER]
CC: Maldonado, Lewis [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=e9fc00f6394344feb7bc9c0041c6c289-LMALDONA]; Lyons, John [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=e5e01999762d415fb201e246c3c464a7-JLYONS]
Subject: FW: SF Magazine article 1/3/16 re Hunters Point Tetra Tech

From: LEE, LILY
Sent: Wednesday, January 4, 2017 3:33 PM
To: Huitric, Michele <Huitric.Michele@epa.gov>; Harris-Bishop, Rusty <Harris-Bishop.Rusty@epa.gov>; Chesnutt, John <Chesnutt.John@epa.gov>; Herrera, Angeles <Herrera.Angeles@epa.gov>; Manzanilla, Enrique <Manzanilla.Enrique@epa.gov>; Reyes, Deldi <Reyes.Deldi@epa.gov>; Lane, Jackie <Lane.Jackie@epa.gov>; Yogi, David <Yogi.David@epa.gov>
Subject: SF Magazine article 1/3/16 re Hunters Point Tetra Tech

<http://www.modernluxury.com/san-francisco/story/trouble-below>

Trouble Below

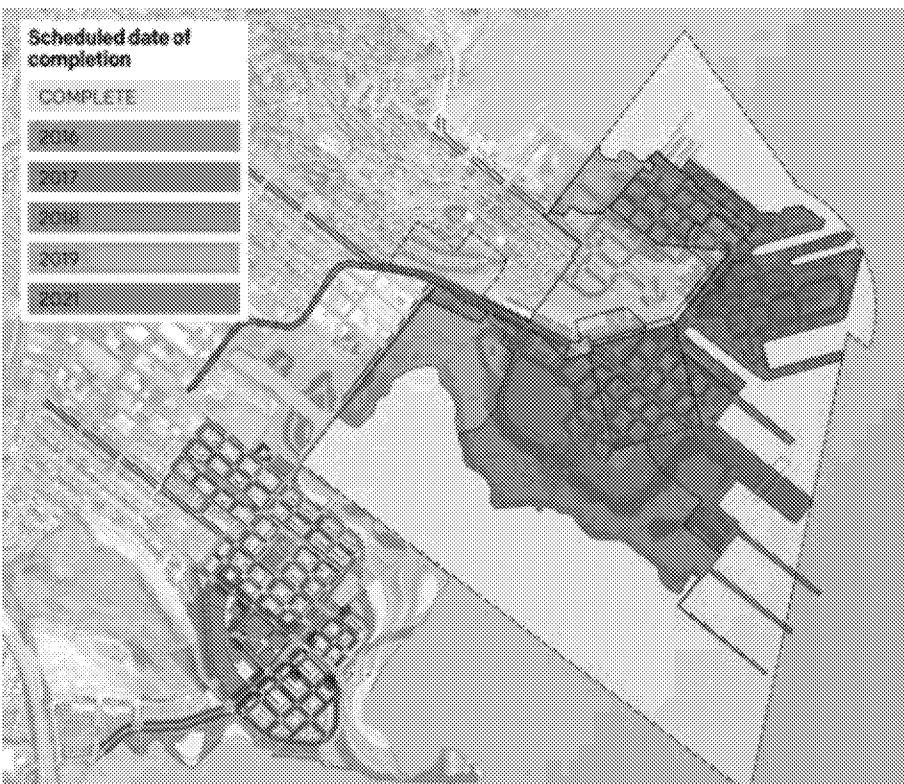
Chris Roberts | Photo: Michael Byers | January 3, 2017

The San Francisco Shipyard could be this city's housing future—if it isn't undone by its own toxic, radioactive past.



SLIDESHOW

(1 of 2)



Hot properties

In a plan stretching into the 2020s, FivePoint proposes to build up to 12,000 homes at the Shipyard and at Candlestick Point. As of December 2016, 205 homes had been finished, but that was before the EPA put an indefinite hold on the development.

(2 of 2)

Up on the hill above the former Naval Radiological Defense Laboratory in the Hunters Point shipyard, there's an asphalt-topped basketball court. But good luck getting a game. One of the rims is gone, and even if it weren't, there's nobody around anyway, even on the kind of sunny

afternoon that packs parks all over the city. Hanging out here, near the dilapidated fences marked with yellow-and-black signs warning of "multiple environmental and health hazards"—eerie and foreboding, even in the middle of the day—just isn't something people do.

But city leaders are hoping they someday will. Further up the hill from the lab and a block or so away, condos rise out of the ground, some of the 12,000 homes slated to fill a planned neighborhood tabbed the San Francisco Shipyard. Almost out of sight is the derelict lab, a windowless, seven-story monolith of a building where the U.S. Navy once stored dangerous radioactive material like depleted uranium in shielded "caves" and conducted nuclear experiments while workers ate lunch in the next room. The old lab is on Crisp Road, which is where the S.F. Shipyard wants to site its jaunty retail strip. The field across the road and flush up against the bay shore is where the parks and kids' playing fields are envisioned. This is the shipyard's old landfill, 22 acres of buried radium dials, sandblasted waste from irradiated ships, and God knows what else. (Even the navy, in a running theme, doesn't claim to know everything that's in there.)

Today, heaps of dirt from the area sit here beneath vast black tarps. This was where a brush fire smoldered for a month back in 2000 before the navy copped to what locals could clearly see from their windows: The local EPA Superfund site was burning. At night, says Marie Harrison, a longtime resident and environmental activist, you could see multicolored flames, sometimes glowing green—a surefire sign of toxins. This is the land the city tried to use to cajole the 49ers into staying in San Francisco. Instead, the team fled to Santa Clara. "I don't blame them," says Harrison.

It was always going to take a great deal of time and effort—and money—to transform the decrepit shipyard into a hipster- and family-friendly neighborhood with thousands of homes, acres of parks and greenways, ball fields, and perhaps five million square feet of office space. So far, only 90 of the more than 500 acres of navy land have been handed over by the navy for development, and only 205 homes were completed as of December. Most of the former military base is still a Superfund site, with low-level radiation emanating from the landfill, storm drains, sewer lines, and various buildings where the navy ran a regional clearinghouse for radioactive waste and prepared for a Soviet attack by, among other things, operating a particle accelerator and injecting radioactive material into living creatures to see what would happen. (In short: bad things.) But San Francisco needs the S.F. Shipyard. Without 21st-century housing atop the land where the navy processed nuclear-age ships, Mayor Ed Lee can't meet his pledge of 30,000 new or refurbished homes by 2020.

Getting to this point, with those 205 homes sitting in a wasteland, has required decades. Now whatever comes next may take quite a bit longer: In September, the process of handing over land was placed on indefinite hold. Thanks to an environmental scandal of still unknown proportions, the shipyard's transformation has ground to a halt. How long of a grind we're in for remains an open question.

Building a new neighborhood on top of an environmental blight works like this: The navy must clean up the land—removing more-mundane toxins like cancer-causing PCBs and petroleum by-products as well as scary-sounding radionuclides like cesium and radium, which the navy spilled on buildings and in dirt and tossed into the landfill—before it's given to the city. Environmental watchdogs from the EPA, the California Department of Toxic Substances Control, and the local Department of Public Health observe the process and verify that the land is clean (or at least clean enough for people to live on). Then the city transfers it to the developer FivePoint, a new entity whose majority shareholder, Miami-based megadeveloper Lennar Urban, negotiated the original agreement.

Since the United States Navy is in the national defense business and not the environmental cleanup business, it decades ago contracted the cleanup job out. And the contractor—a massive Pasadena-based company called Tetra Tech with a long history of winning government contracts—has admitted to misdeeds in at least part of its work at the shipyard.

Tetra Tech has been on the job here since at least the mid-1990s, according to the navy. (Exactly when the company began analyzing water and soil at the site is another thing the navy has admitted it can't quite put its finger on.) Following complaints from whistle-blowers that the cleanup was being botched, Tetra Tech employees admitted that between 2011 and 2012, they were tasked with pulling soil samples from an area known to be clean and passing them off as soil from an area known to be contaminated. And these bait and switches might be the tip of the radioactive iceberg.

Out of more than 25,000 soil samples pulled over a 23-year period, the navy has so far identified 386 as "anomalous," it admitted in an email. Several ongoing state and federal investigations are now trying to ascertain exactly how clean the shipyard really is; the collective goal, per a September 13 letter from the EPA to the navy, is that "the actual potential public exposure to radioactive material at and near" the shipyard be "clarified." Until then, the transfer of more than 400 acres of land has been halted.

"It's alarming," says Bradley Angel, executive director of the San Francisco-based environmental nonprofit Greenaction. Angel and his outfit are calling for the navy to fire Tetra Tech immediately, and for its decades of work to be rechecked: "We don't think any of this can be trusted."

Greenaction further insists that the prospect of thousands of homes mushrooming in the city's southeast would remain problematic even if Tetra Tech's work was beyond reproach. That's because, according to academics with UC Santa Cruz's Environmental and Nuclear Policy Program, the navy's definition of "clean" is, in fact, dirty by the EPA's own definition.

In its plan to clean up the shipyard, the navy used standards that date from as far back as 1974, UCSC lecturer Dan Hirsch pointed out in a presentation he gave at a public meeting. That would allow exposure to radioactive material at rates in excess of current EPA marks by a factor of several hundred—and in some cases, Hirsch claimed, several thousand.

Both the EPA and FivePoint dispute Hirsch's findings. FivePoint also questions his credentials, pointing out that he is merely an "activist" and not a nuclear physicist. (For the record, an actual nuclear physicist, UC Berkeley's Kai Vetter, tells *San Francisco* that the navy's Cold War-era cleanup standards are acceptable for habitation.) The EPA claims that the navy's cleanup has achieved modern radiation standards, in part because of protective layers of either concrete or two feet of soil installed over trouble areas at the shipyard—though these standards also forbid any shipyard resident from growing edible plants, except in raised beds using imported soil, and leave other areas of the former navy base off-limits to hospitals, schools, or other uses that could serve children.

The EPA and the U.S. Nuclear Regulatory Commission are conducting probes. And in November, the navy finally got around to fulfilling a six-week-old request from Mayor Ed Lee and Supervisor Malia Cohen for a briefing on the situation—but only after Representative Nancy Pelosi got involved. After apologizing for the mess, the delay, and letting political leaders find out about the situation via the press, the navy offered to hire a third party to review some of Tetra Tech's work and promised regular updates. Pelosi secured an extra \$7 million in the federal budget to pay for this, atop the \$43.9 million allotted for shipyard cleanup costs this year alone. That it took her prodding for the navy to step-to indicates how serious the problem already is—and how bad it will be if things get worse.

There are some vestiges of Hunters Point's nuclear and military heritage that are here to stay. Some of them are too big to move, like the 8,400-ton gantry crane standing astride one of the piers, a gently oxidizing monster that's become the S.F. Shipyard's de facto symbol. At the time of its construction in 1947, when it graced the cover of *Popular Mechanics*, it was the world's biggest crane, strong enough to suspend a battleship's 400-ton turret in midair. But even brand-new, it was a bit of an albatross: Thanks to air power, battleships bristling with guns were largely obsolete even before World War II concluded. Thus, nearly all of the naval work done at the shipyard before it closed in 1974 was on aircraft carriers and submarines. The developers of this land are keen to play on its industrial nostalgia. But the shipyard's past was a mixed bag. And its future is uncertain.

Other remnants of the past are too dangerous to move, like whatever lies buried not far from Marie Harrison's former Hunters Point home. A decade ago, when the scariest health risk in the area was asbestos-laced dust dislodged from hillsides, Harrison knew almost everyone who lived in the nearby projects and houses. "Now they're all gone," she says, driven away by the city's hard economics as well as the neighborhood's health hazards: a now-shuttered PG&E gas-fired power plant; an open-air sewage treatment plant; and, most of all, the low-level radiation emanating from the shipyard. This is what Harrison and other locals agitated about for decades. Their concerns have, at last, been acknowledged. But too late: "They all moved away." So did Harrison; she now lives in Stockton.

Those people are out of the picture. What's coming into focus is the promise of tens of thousands of new people moving onto the land. If the S.F. Shipyard is found to be dirtier than we know, it will be a potential environmental disaster—and, in housing-starved San Francisco, an economic one as well. "I would be somewhat concerned as a parent moving into the new development," notes Vetter, the UC Berkeley physicist, despite his declaration of the site's habitability.

"However, I would be concerned as a developer and an investor, too. Imagine, billions of dollars of investments, and then someone finds a piece of radium! The value of this investment would go to zero very quickly."

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